

# STATE OF TENNESSEE ALCOHOLIC BEVERAGE COMMISSION

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# **Programmer Analyst IV**

The Tennessee Alcoholic Beverage Commission (ABC) is seeking a highly qualified and motivated individual for a Programmer Analyst IV position to work on a Commercial Off the Shelf (COTS) software License and Permitting solution. This position will work directly with the agency's IT Director, Project Management team, Agency Business units and the vendor to implement the system within a tight time frame.

Under general direction the Programmer Analyst IV; will analyze and document requirements for information systems; develop plans for automated information systems from project inception to conclusion; works with vendors, users and staff to ensure milestones and timelines are met; coordinate closely with vendor staff, users and technical staff to ensure proper implementation of program and system specifications; identify current operating procedures and clarify program objectives; develop, in conjunction with functional users, business process improvements; develop, design, document, maintain, evaluate, support and provide problem resolution for information systems applications; provide support for the installation, testing, implementation, and ongoing maintenance of information systems; performs a variety of technical and analytical services for ABC core Business Functions; analyzes, evaluates and trains users on agency systems; including modifying code, participate in code reviews, develops databases and/or implements complex business application programs and maintenance; provide general support of a Commercial Off the Shelf software system and performs other related duties as assigned.

Strong technical experience in using standard architectural and design best practices are required, such as object-oriented programming, Web services, service-oriented architecture, knowledge of coding, testing, supporting and debugging software, Analyzing Information, General Programming Skills, Software Design, Software Debugging, Software Documentation, Software Testing, Problem Solving, Teamwork, Software Development Fundamentals, Software Development Process.

The successful applicant will possess strong written and oral communication skills with superior organizational skills. Candidates must be able to work effectively with all levels of staff from clerical through management. Strong negotiating, analytical, group facilitation, and relationship management skills are required. Candidates must work well in a team environment and must be proficient with Microsoft Office Suite and Windows 7. Experience with client server and web-based applications required.

## Principal Duties and Responsibilities: Analyst

- Provide assistance in supporting our information systems with focuses on end user support, security, upgrades, testing, database maintenance and report design/creation/publishing.
- Defines application problem by conferring with clients; evaluating procedures and processes.
- Provide information system recommendations to IT management pertaining to information system capabilities, implementations and customizations.
- Define the goals of the system and devise flow charts and diagrams describing logical operational steps of programs.
- Interview or survey workers, observe job performance and/or perform the job in order to determine what information is processed and how it is processed.
- Provide staff and users with assistance solving computer related problems, such as malfunctions and program problems.
- Identify, understand and plan for organizational and human impacts of planned systems, and ensure that new technical requirements are properly integrated with existing processes and skill sets.
- Continually increase familiarity with operational and departmental information system needs and requirements from operational and departmental perspectives.
- Provides assistance and advice to business users in the effective use of applications and information technology.
- Collaborate with input from IT management on:
  - approval/implementation of information system modifications/custom programming
  - re-prioritization of current or upcoming information system related tasks/projects

- Coordination and the execution of approved new information system implementations.
- Coordinate closely with colleagues, developers, testers and a variety of end users to ensure technical compatibility and user satisfaction.
- Identify, analyze and improve the efficiency of key business processes
- Preform ongoing Process Improvement by defining the existing structure and process (AS-IS), and identify key process areas that need renovation.
- Develops solutions by preparing and evaluating alternative workflow solutions.
- Analyze information processing or computation needs and plan and design computer systems, using techniques such as structured analysis, data modeling and information engineering and provide use cases, flowcharts or even database design.
- Produce/develop/maintain Technical and functional documentation including general support documents, technical
  documentation, user guides, and operations manuals for new and existing applications and processes. (ie. Requirement
  gathering, systems design procedures, test procedures, and quality standards.)
- Provide information system related technical/help desk support to internal and external customers and provide backup technical support for general help desk issues as needed
- Provide minor and complex programming for some in-house IT projects.
- Expand or modify system to serve new purposes or improve work flow by using BPI.
- Create user defined reports including ad-hoc querying capability using standard business intelligence and reporting tools.
- Participate in proactive monthly/weekly/daily meetings to achieve departmental goals and deadlines.
- Provide leadership to others through example and sharing of knowledge and skills.
- Perform system testing and validate the results.
- Coordinate with vendor and agency SMEs with User Acceptance Training
- Validate training materials provided by vendors on COTS software and ensure proper operations by training staff.
- Perform other related duties as delegated by the management.
- Analyze current systems and create, test, implement, maintain and document programs through knowledge of the systemdevelopment cycle.
- Documents the data elements, input and output sources, and how data will be transmitted through a proposed system.
- Prepares design documentation containing the design narrative, data flow diagrams, triggered event and data dictionary to be used in the writing of program source code.
- Prepares program documentation which includes the test plan, program specifications, program narrative, client approval, and results of walkthroughs and testing.
- Draws graphical diagrams to describe process flow and relationships and the manual and automated business processes of the system.
- Creates a conversion plan describing the steps required for data migration.
- Writes a test plan describing the types of data and tests needed to check all known possible conditions within the program.
- Modifies program design narrative based on user feedback and walkthrough results.
- Defines user input and output using design tools.

## **Principal Duties and Responsibilities: Programmer**

- Develops information systems by designing, developing, and installing software solutions.
- Develops designs, modifies, or creates new applications, ideas, relationships, systems, or products.
- Develops software according to the design specifications using established software application standards.
- Codes database scripts and stored procedures in order to retrieve and manipulate specific data based on required business processes.
- Changes software to address any unexpected or inaccurate processes identified in the system test or through user feedback.
- Changes software components to access the appropriate environment by updating data linkages, data libraries in order to implement the approved system.
- Composes messages which will be output by programs to assist in error identification and correction.
- Develops software applications that imports/exports data, connects to databases, designs user interfaces.
- Monitors and reviews information from materials, events, or the environment, to detect or assess problems.
- In depth knowledge in one or more programming languages (e.g. PHP, .NET, HTML, C++, etc.)
- Ability to use one or more development language (e.g. C++, PHP, HTML, etc.)
- Compiles, codes, categorizes, calculates, tabulates, audits, or verifies information or data.
- Reads and interprets written functional specifications.
- Identifies the necessary data elements, keys/search criteria, indexes, data retrieval requirements, and level of security needed for different types of system data.
- Generates data to test programs and/or system conditions by extracting data from existing sources or entering new data.

- Tests and troubleshoots programs using generated data to determine if the program produces the correct execution sequence and programs interface as specified.
- Designs databases and data tables and files based on state approved data naming and structure standards.
- Producing detailed specifications and writing the program codes
- Testing the product in controlled, real situations before going live
- Determines operational feasibility by evaluating analysis, problem definition, requirements, solution development, and proposed solutions.
- Documents and demonstrates solutions by developing documentation, flowcharts, layouts, diagrams, charts, code comments and clear code.
- Provides information by collecting, analyzing, and summarizing development and service issues.

#### **Qualifications:**

- Extensive knowledge of data processing, hardware platforms, and enterprise software applications.
- Technical experience with systems networking, databases, Web development, and user support.
- Strong analytical and problem solving skills.
- Experience in the development and implementation of standards, procedures and guidelines to support operational processes.
- Experience in the System Development Life Cycle (System Investigation, System Analysis, System Design, Programming and Testing, Implementation and Operation and Maintenance).
- Knowledge of relational databases, web and client-server concepts.
- Knowledge of multiple Programming languages.
- Knowledge of Data Structure.
- Knowledge of Testing Techniques
- Knowledge of data design and data modeling.
- Knowledge of Programming Concepts.
- Knowledge and Concepts of Internet Protocols.
- Knowledge of SSL and certificates for enhancing application security.
- Knowledge of System Architecture.
- Knowledge of XML Web Services.
- Knowledge of code reviews to ensure compliance with best practices, reusability, maintainability and scalability.
- Knowledge of cross platform communication techniques.
- Knowledge of developing software using Object-oriented programming OOP.
- Knowledge of code management and versioning control software.
- Experience with programming API's for Web services
- Experience with Complex Report writing

#### **Education:**

- Required Post-secondary degree in computer science or related field or a combination of related experience and education.
- Preferred B.S. in IT or related field. business or technology focus

## **Experience:**

- Required one to three years of information systems support while working on a project team.
- Prefer experience working in the governmental sector (local, state, or federal).
- The position prefers at least 5 years of technology experience and 3 years hands-on in the IT field or in a related area.
- A minimum of 3 years of current experience as a Programmer Analyst is preferred.

All employees of the Tennessee Alcoholic Beverage Commission are expected to be of good moral character. A criminal history records request will be completed for any candidate receiving an offer of employment with the Board.

Submit a complete and up to date Resume to the attention of: doug.duncan@tn.gov.

All resumes will be reviewed and screened and interview appointments will be set with selected candidates. No phone calls please.

Applications cannot be submitted to the Department of Human Resources on NEOGOV for Executive Service job postings.